

from the development performed by the Swedish inventor Bernt E L Wihk, who in May 24, 1993, did file a Swedish application relating to a method and device for charging lead accumulators that was filed as WO94/28610 (see page 1 of the present description) and matured into US Patent No. 5,701,069. Hence, these new findings made by Mr. Wihk back in the early nineties were publicly available by means of the published Swedish patent application already at the end of 1994. Mr. Wihk entered onto the Swedish market with an apparatus in accordance with his invention. SE '720 and '579 are merely improvements to the basic invention made by Mr. Wihk.

Features defined in present claim 1 ✓

A method for treatment of accumulators having at least one cell comprising the steps of:

- a) applying a varying direct current from a charging unit, to at least one cell of an accumulator,
- b) in intermittent current supply periods,
- c) having a length of between 0,01 and 0,5 seconds, and
- d) a current level during said current supply periods amounting to between 80-100A,
- e) sufficient to generate gas in the accumulator, and
- f) strong enough for the at least one cell to reach a voltage of at least 2,5V during the current supply periods,
- g) interrupting the intermittent current supply periods with current free pauses,
- h) having a length of 1-20 seconds, and
- i) registering process data for at least one cell in the accumulator during the treatment process, and
- j) controlling the treatment process with said process data.

Comparison with the SE '720 (Reidar Gustavsson)

SE '720 discloses a method for treatment of an accumulator having at least one cell wherein a three-step process is used. Initially there is a first step where a constant direct current voltage (DC) is supplied. In a second stage a pulsating voltage is supplied and in a third and final step again a constant direct current voltage is supplied. There is no mentioning whatsoever, or any indication of how long the cycles of pulsation should be, nor which levels of voltage that should be used for the pulsations. Furthermore, SE '720 does not disclose anything relating to current-free pauses. SE '720 also does not disclose or even suggest any the

following features defined in present claim 1:

- b) in intermittent current supply periods,
- c) having a length of between 0,01 and 0,5 seconds, and
- d) a current level during said current supply periods amounting to between 80-100A,
- e) sufficient to generate gas in the accumulator, and
- f) strong enough for the at least one cell to reach a voltage of at least 2,5V during the current supply periods,
- g) interrupting the intermittent current supply periods with current free pauses,
- h) having a length of 1-20 seconds.

For these reasons, the presently claimed invention cannot be anticipated or even obvious over SE '720.

Comparison with SE '578

SE '578 cannot properly be considered prior art since it was published in November 2000, which is more than a year after the June 15, 1999 filing date of priority document SE '286 and after the May 24, 2000 international filing date of the parent PCT/SE00/01049. For this reason alone, SE '578 cannot anticipate or make obvious the claimed invention.

Nevertheless, there are essential differences SE '578 and the present invention. First, SE '578 does not disclose the use of current free pauses. Second, there is no disclosure of registering process data for at least one cell in the accumulator during the treatment process and controlling the treatment process with said process data. Hence, there exists clearl distinguishing differences between SE '578 and the present invention.

Moreover, the teaching of SE '578 is very different from the present invention since SE '578 teaches that the current should be varied to follow a triangular pattern, whereas the present invention does not require the use of any such specific pattern to be followed for the current supply in order to achieve the object of the invention.

Thus, there is no disclosure in SE '578 which anticipates or make obvious the present invention.

Arguments regarding ownership of SE '720


Applicants submit that the statements made by Protestor regarding ownership

of SE '720 are misleading. According to the view of Mr. Åke Johansson, President of Holgia Aktiebolag, (Applicant for parent PCT/SE00/01049) the decision of the Swedish Court of Appeal did not sufficiently consider the actual agreements, which might be construed differently by a Swedish Civil Court. Hence, ownership concerning SE '720 is still not finally settled and Mr. Johansson believes he is the rightful owner of SE '720. In any event, as is evident from the above, SE '720 does not make obvious or anticipate the present invention.

In view of all of the concerns of record having been addressed, Applicants submit that the present invention is in condition for allowance and Notice to that effect is respectfully requested.

Respectfully submitted,
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